michigan league of conservation voters

Date: October 5, 2015

To: Members of the House Natural Resources Committee

From: Charlotte Jameson, Policy Manager, Michigan League of Conservation Voters

Re: Testimony in Opposition to House Bill 4345

Please note that Michigan LCV currently intends to score a committee vote on HB 4345 in our *Environmental Scorecard.*

The Michigan League of Conservation Voters (LCV) is the non-partisan, political voice for Michigan's land, air, and water. **On behalf of our statewide membership and our Board of Directors, Michigan LCV expresses our opposition to House Bill 4345, as introduced.** The bill would phase out the sale and manufacture of personal care products containing tiny plastic particles commonly known as microbeads. Michigan LCV supports the effort to remove plastic mircobeads from consumer products. However HB 4345 contains loopholes that would allow so-called "biodegradable plastic" to continue to be used in personal care products in Michigan.

Mircoplastics are plastic particles 5 millimeters in diameter or smaller. Manufacturers of personal care products add plastic mircobeads as exfoliating abrasives to facial cleansers, toothpastes, and other consumer goods. Currently, mircobeads are found in over 100 products. 5 Gyres, a research organization focused on reducing aquatic plastic pollution, estimates that one single care product, like Neutrogena's Deep Clean, contains 360,000 microbeads in a single package. The plastic particles are too small for wastewater treatment plants to filter out and as a result they wash down our drains and directly into lakes and rivers.

Research has shown that mircoplastics are present in large quantities in the Great Lakes. Studies have indicated that the concentration of the plastic particles in the Great Lakes surpasses that of marine environments. In 2012, Dr. Sherri Mason of the State University of New York at Fredonia and Marcus Eriksen of the 5 Gyres Institute found microplastic fragments numbering more than 460,000 per square kilometer in Lake Erie and in 2013, as many as 1.1 million per square kilometer in Lake Ontario.

HB 4345 defines a plastic mircobead as "an intentionally added **nonbiodegradable** solid plastic particle less than 5 millimeters in all dimensions." By restricting the ban of plastic mircobeads to only "nonbiodegradable solid plastic particles," the bill would allow any plastic that has been labeled biodegradable to continue to be used in personal care products.

The bill does not define biodegradable and it is unclear to what extent biodegradable plastics would actually degrade in freshwater environments. For example, plastics like polylactic acid (PLA) have been labeled biodegrabale because they breakdown at extremely high heat. Mircobeads that only meet that standard of biodegradability would then not biodegrade in the cool temperatures of lake water. Further, there is no national or international standard for biodegradability of plastics in freshwater and the only international standard for marine biodegradability was withdrawn in 2014 for additional review. In short, there is no guarantee that plastics labeled biodegradable would in fact biodegrade and in what environments and over what timeframe that breakdown would happen. **All forms of plastic mircobeads should be prohibited unless they meet a standard established by an independent third party, like the American Society for Testing and Materials, whereby plastics completely and rapidly biodegrade (mineralize) in freshwater without producing harmful byproducts.**

States across the country are taking action to phase out the use of plastic mircobeads and doing so without including legislative loopholes. Recently, the California Assembly passed a bill that would both ban products containing plastic mircobeads and also prohibit companies from using so-called biodegradable plastics. Maryland also banned the sale and manufacture of personal products containing plastic mircobeads. The legislation requires the Maryland Department of the Environment to establish regulations to ensure that alternative exfoliants meet international standards for biodegradability in wastewater treatment plants and the marine environment. Michigan LCV supports these different approaches to restricting plastic mircobeads.

We are already seeing the negative impacts of the build up of mircoplastics in our Great Lakes. Mircoplastics can be mistaken for food by fish and ingested. Studies have demonstrated plastic present within 25 different species of fish in the Great Lakes system. Additionally, the mircoplastics act as glue for toxins. PCBs, DDT, and other harmful chemicals present in our waterways stick to the plastic mircobeads and build up over time. When fish eat these toxic plastic particles the toxins bioaccumulate and can be passed up the food chain to humans.

Michigan has a great opportunity right now to protect our Great Lakes by passing a bill that phases out plastic mircobeads. However, meaningful, effective action depends on ensuring there are no loopholes within the legislation that would continue to allow these tiny plastic particles to drain into our Great Lakes.

We urge members of the House Natural Resources Committee to oppose HB 4345 until the nonbiodegradable language is removed or until biodegradability is tied to a regulatory process similar to Maryland's.

We look forward to working with the House Natural Resources Committee on this issue.

Sincerely,
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